

2008 Leading by Example Awards

Presented by the Commonwealth of Massachusetts

Executive Office of Energy & Environmental Affairs, Executive Office of Administration & Finance, Department of Energy Resources, Department of Environmental Protection, Operational Services Division, Division of Capital Asset Management



The **Leading by Example Awards** recognize outstanding efforts among Commonwealth agencies, public higher education institutions, and municipalities that have established and implemented policies and programs resulting in significant and demonstrable environmental benefits.

The 2008 LBE Award Winners

Public Higher Education



MASSACHUSETTS COLLEGE OF ART AND DESIGN

MassArt has taken several actions to improve energy efficiency, reduce greenhouse gas emissions, advance water conservation, reduce waste, and promote “green” design and activities on campus. Recent highlights include the installation of a new operating technology for its boiler systems, resulting in a projected annual savings of \$73,000, with a projected payback of 2.1 years, and the collaborative facilities- and student-led design and installation of a green roof. Since FY06, MassArt has reduced its total water consumption by nearly 18% with the installation of low flush toilets and urinals, new fixtures, and waterless urinals resulting in a savings of more than 1.2 million gallons of water. Additionally, the college is designing a cistern for the outer edge of the campus’s green roof for rainwater collection and plans are underway for a grey water system in an existing building. Other activities include comprehensive and innovative waste reduction and recycling, tree planting, purchase of environmentally friendly cleaning products, and creation of a sustainability committee comprised of students and faculty.

UNIVERSITY OF MASSACHUSETTS-DARTMOUTH

In FY08, **UMass-Dartmouth** created its Office of Campus and Community Sustainability to coordinate a growing interest in environmental and energy issues across campus as well as develop comprehensive sustainability initiatives. Recent highlights include installation of the campus’s first green roof; establishment of campus-wide policies for “green” purchasing including commitment to Energy Star rated equipment; and creation of recycling and solid waste programs that have resulted in reduced solid waste removal by 550 tons in 2007, with a projected annual cost savings of \$41,000. The university is also undertaking campus-wide efficiency and renewables programs including prospective energy performance contracts and renewable energy systems potentially including biomass, geothermal, and wind. Academically, the university recently approved a Sustainability Minor and is currently developing graduate level certificate programs.



State Agencies



BUREAU OF STATE OFFICE BUILDINGS

The **Bureau of State Office Buildings**, through implementation of sustainable practices, new installations, and retrofit projects, has achieved significant energy and cost savings in the State House, John W. McCormack Building, Charles F. Hurley Building, Eric Lindemann Building, and Government Center Complex. Some of BSOB’s projects include lighting upgrades and bulb replacement, mechanical and direct digital control upgrades, replacement of HVAC equipment, and facility performance evaluation. In the State House for example, BSOB replaced 2,200 incandescent bulbs with CFLs resulting in an annual savings of 350,000 kWh and \$52,000, and a reduction of 146 tons of CO₂. In addition, two BTU boilers were replaced with energy efficient modular boilers, reducing operating costs by 20% for a savings of 990,000 kWh and \$148,500.

MASSACHUSETTS PORT AUTHORITY

Massport’s Emissions Reduction Program contains four strategic goals: reduce emissions from facilities and operations, offset airport-wide emissions, reduce energy consumption, and employ renewable energy resources. Program initiatives include an alternative fuel vehicle program, aggressive High Occupancy Vehicle (HOV) goals, CNG shuttle buses along with an on-airport CNG station, advancing the conversion of taxi cabs to hybrid vehicles, and promotion of ultra-low sulfur diesel vehicles. Massport is also piloting 20 roof-top micro-wind turbines, which have been installed on its administrative offices at the airport. The Authority plans to purchase renewable energy certificates so that by the end of calendar year 2009, all of the electricity used for its operations will be offset. In addition to energy conservation programs, Massport has incorporated LEED goals in all new development and redevelopment projects. In 2006, Logan Airport’s Terminal A became the world’s first LEED-certified passenger terminal.



Municipal



TOWN OF BARNSTABLE

The **Town of Barnstable** has developed comprehensive sustainability initiatives including municipal composting of yard waste, conducting a feasibility study for 3MW of solar on a capped landfill, evaluating 4 schools and 2 municipal buildings for solar PV installations, purchase of a Ford Escape Hybrid as a “test model” for the DPW, and the use of 5% bio-diesel fuel in DPW vehicles in FY08. Additionally, the Town secured a two-year contract with a vendor that utilizes 100% organic lawn control as a pilot project for municipal landscape management. Barnstable has also made a commitment to high efficiency renovation of existing buildings as well as new construction. For example, the new youth and community center currently under construction has a large cogeneration plant, roof mounted solar panels, wind turbine, innovative heat recovery systems from refrigeration equipment, and efficient lighting and HVAC systems.

TOWN OF SHIRLEY – PUBLIC SCHOOLS

Shirley Public Schools hired NGrid to relamp and rebalast compact fluorescent and incandescent lighting at the Lura White Elementary School as well as engaged staff to better manage electricity, and as a result, achieved a 14.3% reduction in the first ten months of implementation compared to the prior year for a savings of \$8K. The school projects a 23% reduction for FY09. The Shirley Middle School also achieved significant savings through staff engagement and use of automated lighting controls reducing electricity by 11.5% (FY07 baseline). The middle school estimates a 20% reduction in FY09. The schools also instituted a cardboard recycling program in 2008, which is expected to save \$3K annually.

